REMARKS/ARGUMENTS

Reexamination of the captioned application is respectfully requested.

Atty Dkt: 900-420 Art Unit: 1746

A. SUMMARY OF THIS AMENDMENT

By the current amendment, Applicants basically:

- 1. Thank the Examiner for allowance of claims 9, 12, 18, 28, 30, 32 and 34.
- Thank the Examiner the indication of allowable subject matter in claims 5 and 25.
- Rewrite claims 5 and 25 as independent claims, with amended independent claim 25 including limitations of original cliam 21.
- Rewrite claims 2 and 22 as independent claims, including limitations of claims 1 and 21, respectively.
- Amend independent claim 8 to include limitations of dependent claim 10.
- Amend the dependency of claim 10 so that claim 10 depends from allowed claim 9.
- 7. Amend independent claim 11 to include limitations of claim 10.
- 8. Amend the dependency of claim 13 to depend only from claim 12.
- 9. Amend claims 2, 5, 10, 13, 22 and 25.
- 10. Cancel claims 1, 3, 4, 6-7, 11, 14, 15, 19-21, 23, 24, 26, 27, 29, 31 and 33 without prejudice or disclaimer.
- Add new claim 35 (as a combination of limitations from claims 23 and 25)..
- 12. Respectfully traverse all prior art rejections.

B. PATENTABILITY OF THE CLAIMS

Claims 1-4, 6-8, 10, 11, 13-15, 19, 20, 27, 29, 31 and 33 stand rejected under 35 USC 103(a) as being unpatentable over the Suzuki et al reference. Claims 21-24 and 26 under 35 USC 103(a) as being unpatentable over the Palmore et al reference. All prior art rejections are respectfully traversed for at least the following reasons.

According to one aspect of claims 2, 8, 11, and 22, an anode-side collector is a layer containing a biochemical catalyst which decomposes the material for fuel to generate hydrogen, the layer being formed within the housing between the anode side supply inlet and the anode. This claimed structure advantageously facilitates:

- taking a current from the anode-side collector layer directly;
- taking a current from the anode which is attached to the anode-side collector layer as shown in the Fig. 1;
- a size reduction and shape simplification (as described on page 9, lines 5 to 8)
 of the specification;
- more efficient generation of electricity than the ordinary methanol fuel cell (as described on page 18, lines 10 to 14) of the specification.

As the Examiner describes in the final OA, Karube et al. (Biotech and Bioeng. 1977) teach a fuel cell having a layer of C. butyricum immobilized on the surface of the fuel cell anode.

None of applied prior art -- including Karube et al. (Biotech and Bioeng. 1977) – disclose the feature of the anode-side collector is the layer containing the biochemical catalyst, which decomposes the material for fuel to generate hydrogen, and being within the housing, and thus enablement of taking a current from the layer containing the biochemical catalyst.

YAMAMOTO, N. et al. Atty Dkt: 900-420 Serial No. 10/087,994 Art Unit: 1746

C. MISCELLANEOUS

In view of the foregoing and other considerations, all claims are deemed in condition for allowance. A formal indication of allowability is earnestly solicited.

The Commissioner is authorized to charge the undersigned's deposit account #14-1140 in whatever amount is necessary for entry of these papers and the continued pendency of the captioned application.

Should the Examiner feel that an interview with the undersigned would facilitate allowance of this application, the Examiner is encouraged to contact the undersigned.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: /H. Warren Burnam, Jr./

H. Warren Burnam, Jr. Reg. No. 29,366

HWB:lsh 901 North Glebe Road, 8th Floor Arlington, VA 22203 Telephone: (703) 816-4000 Facsimile: (703) 816-4100